

CAN COLLABORATIVE LEARNING ENHANCE L₂ WRITING?

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ABSTRACT

The purpose of this study was to find out whether or not collaborative learning can enhance L₂ writing. The genre used was expository writing. The population consisted of 80 first year Arts Education students at the University of Nigeria offering the equivalent of Freshman Composition. Among the skills taught was expository writing. One research question and one null hypothesis guided study. A quasi-experimental research design comprising non-equivalent control group was used to execute the study. The students were randomly assigned to treatment and control groups after a four-week explicit driven instruction on the techniques of expository writing and pre-tested. The control group practiced writing independently on given topics for four weeks while the experimental group did so in groups of five for the same duration. Both the control and experimental groups were post-tested after four weeks of practice. Data were generated, using self-constructed instrument tagged *Expository Essay Achievement Test (EEAT)*. The data were analyzed, using Mean, Standard Deviation and t-test at 0.05 level of significance. The study showed that there was a significant difference between the achievement of treatment and control groups in the post-test. The study concluded that collaborative interaction in writing practice promotes better independent L₂ writing, given similar writing tasks.

KEYWORDS: L₂ Writing, Expository Writing, Collaborative Learning

INTRODUCTION

Developments in English language pedagogy in the late 20th century witnessed a shift in paradigm. The shift was from, what Tompkins (1990) termed, performance model (focus on the teachers' ability) to collaborative model (focus on the learners). This means that, in the 21st century, the preferred model of English learning is one that focuses on collaborative interaction among learners. This new model is variously called collaborative learning (Weiner, 1986; Tompkins, 1990; Davis, 1993; Crammer, 1994; Miller, Trimbur, Wilkes, 1994; and Gokhale, 2005); cooperative learning (Johnson, Johnson, and Smith, 1991; McKeachie, 1994; Slavin, 1995; and Mohan, 2013); team learning (Michaelson and Black, 1994); and collaborative interaction (Mohan, 2013).

There are as many definitions as there are many terms for the same concept. The study provides three of such definitions for collaborative learning (CL)—the preferred nomenclature for this study. Johnson, Johnson and Smith (1991) defines CL as a method of learning which involves learners working in groups to accomplish a common task. For such group work to be successful, the following conditions must apply:

- There is dependence on one another to accomplish the task
- Some part of the task must be shared out to individual members while the rest is done interactively. The interactive session focuses on providing facts and drawing conclusions in order to teach and help one another.
- All the learners are held responsible for doing their individual shares of the task and for the mastery of the entire task.

- Interactants are encouraged to develop and practice trust building, leadership, decision-making, and conflict management
- Goals must be set, periodic assessment made, and directions for improvement charted.

Although the definition of Johnson, Johnson and Smith appear comprehensive, there is need to explore other definitions to determine the core features of the concept. Slavin (1995, p.2) states:

CL is a variety of teaching methods in which students work together in small groups to help one another learn academic content. In CL classroom, students are expected to help each other to discuss and argue with each other to access each other's current knowledge and fill in gaps in each other's understanding.

Gokhale (2005) defines it as a teaching method in which learners work together in small groups to achieve a common goal. The learners are expected to be responsible for one another's learning as well as their own. Thus, the success of one learners helps other learners to be successful.

Based on the above definitions, the following emerge as the major core features of *CL*:

- Synergy
- Small group
- Common task
- Interactive activity

Consequent on the above features, *CL*, in the context of this paper, is defined as a teaching technique where a small group with identical goal tackles a common task for the purpose of achieving a desired goal.

According to Johnson, Johnson, and Smith (1991), there are three types of collaborative effort. These are:

- Formal learning groups
- Informal learning groups
- Study teams

Formal learning groups are created for a specific purpose in a single class period or over several weeks. The purpose may be to complete a laboratory experiment, write an eyewitness report or carry out a project that may last for a period of time. Students who work under the above learning group are scored at the completion of their task. On the other hand, informal learning groups are *ad hoc* temporary gathering of students of 3-5 within a single class period for the purpose of discussing a question or applying what they believe they have mastered. Study teams, on their part, are the types that have long duration of about a semester with a precise membership. Members in study teams support, encourage, and assist their members in completing the entire requirements of a task. They inform a member of lost information during his/her absence. These three types characterize non-computer-assisted learning as opposed to *Computer-System Collaborative Learning (CSCL)*. For the purpose of this paper, the study team is used.

CL has asystematized procedure. The first in the organizational structure is grouping in which students are randomly assigned to groups to ensure heterogeneity (Smith, 1986; Flechstner, 1992) or are allowed to make their own

choices of groups (Azmitia, 1986; Cooper, 1990) or intelligent students are evenly distributed to groups (Walvoord, 1986). Second, group size is determined. Smith (1986); Cooper (1990); Johnson, Johnson, and Smith (1991) advocate groups of four or five because large groups cause students not to participate actively. Third, groups are kept together so that each group is productively active. (Walvoord, 1986; Doise, 1990). Fourth, teams are helped to plan how to proceed. Each group is urged to initiate a plan of action. This is a situation where each group member is assigned a specific task to perform. This assignment is amenable to change. Such tasks, which involve process or motor skills, may not be shared. This study does not require this kind of plan. Fifth, regular checks within the groups are deemed essential. In this case, participants are expected to submit assignments for group discussions. Sixth, mechanisms for checking uncooperative members are provided. This is a process of making group members aware of the consequences of inactive participation. This system, according to Walvoord (1986), works if groups have opportunity in the middle of the project to detect any member who is not participating actively. According to Walvoord (1986) and Connary (1988), the best way to assure comparable effort among group members is to design activities in which there is a clear division of labor and each student must contribute if the group is to reach its goal. In spite of this systematized procedure, CL has inherent problems, among which is evaluation (Weiner, 1986; Bosworth, 1994; Crammer, 1994; Miller, Trimbur and Wilkes, 1994; and Mohan, 2013). However, it has its advantages (Bruffee, 1994).

CL is informed by the following theories:

- Socio-constructivist theory
- Socio-cultural theory
- Shared-cognition theory

Socio-constructivist theory is concerned with learning through interaction with others. This theory is an extension of Piaget's (1928, 1932) theory that focused on the reasons for the cognitive development in individuals. The focus of the theory is on interaction rather than the actions themselves. On the other hand, *Socio-cultural theory* is concerned with the causal relationship between social interaction and the individual's cognitive development. It derives from Vygotsky's zone of proximal development (Vygotsky, 1978). The theory implies that a learner would use the techniques that he learnt during a collaborative effort in solving a similar problem independently. Finally, *Shared Cognition theory* differs from the other two theories in the sense that the environment in which learning takes place is given primary consideration. This means that, while the other theories focus on the collaborators, shared cognition theory advocates that learning of knowledge and skill occur in the place where they are applicable.

Because the goals of CL, according to Mohan (2013), are the gaining of academic knowledge in the context of the academic discourse of the second language, and the maintenance of knowledge of academic discourse in the L₁, where applicable, empirical research on *CL* has focused on the control of independent variables and the study of *CL* in relation to the variables. Johnson and Johnson (1986) reported that cooperative teams achieve at higher level of thought and retain information longer than students who work independently. Gokhale (2005) observed that collaborative learning promoted the development of critical thinking, discussion, clarification and evaluation of ideas. This observation was made by comparing the effect of CL and individual study in enhancing drills, practice skill, and critical thinking in Physics. However, Bloom (1956) noted, in his own study, that both methods were equally effective in gaining factual knowledge. In their own studies, Totten, Sills, Digby and Russ (1991) revealed that collaborative learning gives students an opportunity to engage in discussion, take responsibility for their own learning, and thus become critical thinkers. In their own contribution, Beckman (1990), Chickering and Gamson (1991), Johnson, Johnson, Smith (1991), Goodsell, Maher,

Tinto (1992) found that students learn best when they are actively involved in the learning process. According to these researchers, regardless of the subject matter, students working collaboratively in small groups tend to learn more of what is taught and retain it longer than when the same content is presented, using the performance model (Tompkins, 1990). These studies further revealed that collaborative learners appear more satisfied with their classes. Blaye (1989, 1990) showed that children who had previously worked as collaborative pairs on a task of planning and problem solving were twice as successful as children who had the same amount of experience working alone.

It must be pointed out that, although this study is not concerned with CSCL, the face of *CL* research has changed over the years. The focus on current research is on the role variables play in controlling the effectiveness of the learning environment. Consequently, the following are current research concern in *CL*:

- Identification of domains for collaboration and application of appropriate collaborative learning technique for a given domain.
- The utility of collaborative partners and the roles they assume.
- Assessment strategies to evaluate the need for a particular collaborative role, based on students' interests.
- Teaching multiple students in a collaborative system in a real-time networked environment
- Collaborative interfaces and collaborative communication languages.
- Collaborative student modeling.
- Diagnosis of the status of progress of other peers.

(Culled from Internet <file:\\A:\NODE 5. HTM>, March 22, 2010)

Although the present study, which has as its primary goal to determine whether or not CL enhances L₂ writing, might appear dated in the light of current research on CL, it is the view of the researcher that the study has educational relevance because of its practical application in providing a viable option for combating the poor standard of writing among students in Nigeria (Oluikpe, 2001, 2004) but also in Anglophone West African countries which have identical colonial educational heritage.

This study has reviewed representative studies on non-CSCL research. These studies revealed the effectiveness of collaborative efforts in the performance of tasks, acquisition of knowledge, development of critical thinking, discussion, clarification of ideas and evaluation of ideas in different subject areas. None has examined its effect on L₂ writing. To this end, the purpose of this paper, as has been revealed above, is to determine whether or not CL can improve L₂ writing. Specifically, the study aims at finding the achievement of students who practiced expository writing independently and those who did so collaboratively.

METHOD

The population for this study consisted of 80 first year students of Arts Education of the University of Nigeria who offered the equivalent of Freshman Composition for the 2009/10 academic session. Among the skills taught in the course are study skills and expository writing. Therefore, the writing genre examined is expository writing because it is not only the genre for academic discourse but also the one most commonly used in the wider society. University students are chosen because they epitomize the state of writing performance in the wider society.

A quasi-experimental design comprising non-equivalent control group was used to execute the study.

One research question and one null hypothesis guided the study. Data were generated, using a self-constructed questionnaire tagged Expository Essay Achievement Test (EEAT). The instrument is composed of two sections. Section A deals with the bio-data of each subject of the study including the group assigned in the experiment -- (*I*) control group and (*G*) experimental group. Section B is the space for writing the pre- and post-tests. The EEAT was validated before use. The reliability of the test was 0.74, using Kendall's Coefficient of Concordance (W). The population was subjected to a four-week lecture on the techniques of expository writing. Lecture method represents the explicit teaching that is a common method of teaching at all levels of the educational system in Nigeria. At the end of the lecture period, the population was randomly assigned to control and experimental groups. There were 40 subjects for each group. They were, thereafter, pre-tested after completing the questionnaire distributed to them. The pre-test consisted of an essay entitled: *Universal Basic Education: Its advantages to Nigeria* written for one hour under examination condition. The researcher collected the pre-test. The experimental group was divided into small groups of five (Smith, 1986; Cooper, 1990; Slavin, 1990; Johnson, Johnson and Smith, 1991). Both the experimental and control groups were thereafter subjected to practical application of the knowledge acquired on the techniques of expository writing during the four weeks of explicit teaching. Both groups were asked to practice expository writing, using the following topics:

- Adult Literacy Program in Nigeria
- Why the Universal Primary Education Failed in Nigeria
- The Importance of National Policy in Education in Nigeria
- The Use of Indigenous Language in Teaching in Primary Schools.

These topics were chosen because they belonged to the expository genre relevant to the field of Education in order to make the writing pleasurable. The control group wrote individually while the expository group wrote in their small groups. The practice lasted for four weeks—one topic for each week of three contact hours. Each small group appointed a leader who directed the brain-storming session as guided by the researcher who monitors the work of each group. Each group wrote collaboratively while the leader served as the secretary. After the draft, each group edited its work and submitted it to the researcher, who read and made comments for improvement. The control group wrote individually and submitted at the end of each week its work to the researcher for comments for improvements. Both the control and experimental groups rewrote their essays in the light of the researcher's comments. At the end of the four weeks of practice, both the control and experimental groups were assembled for a post-test. All participants wrote individually under examination condition for one hour. The topic was a replication of the pre-test. The researcher collected the post-tests. Both the pre- and post-test were scored. The scored were subjected to statistical analysis, using Mean, Standard Deviation, and t-test.

From the description of method of research, it becomes clear that, since explicit teaching followed by practice is the most common method of teaching at all levels of Nigerian educational system, the underlying motive of the research is to find out which method of practice produces better result --individual or collaborative.

RESULTS

The results are presented according to the research question and hypothesis. The research question states:

What is the mean difference between the achievement scores of those who practiced expository writing independently and those who did so collaboratively?

Table 1: Students' Pre/Post Achievement Mean (x) Scores and Standard Deviation (SD) in Expository Writing for Both Experimental and Control Groups

Groups		N	X	SD	Mean Gain
Experimental	Pre-Treatment	40	3.54	1.80	2.07
	Post-Treatment	40	5.57	1.59	
Control	Pre-Test	40	3.02	1.04	0.00
	Post-Test	40	3.02	1.04	

H₀₁

There is no significant difference in the mean achievement scores of those who practiced expository writing independently and those who did so collaboratively.

Table 2: Mean, Standard Deviation and t-Test of Pre/Post-Test Scores of the Groups in Expository Writing

Groups		N	X	SD	t	P
Experimental	Pre-Treatment	40	3.54	1.80	7.98	0.05
	Post-Treatment	40	5.57	1.59		
Control	Pre-Test	40	3.02	1.04	1.81	0.05
	Post-Test	40	3.02	1.04		

DISCUSSIONS

As Table 1 reveals, the mean scores of the experimental group for the pre-treatment test is 3.54 with standard deviation of 1.80 while the post-treatment test mean is 5.57 with standard deviation of 1.59. The mean gain is 2.07. On the other hand, the mean scores of the control group for the pre-treatment test is 3.02 with a standard deviation of 1.04 while the post-treatment test mean is 3.02 with a standard deviation of 1.04. Consequently, there is a mean gain of 2.07 in the experimental group and no gain in the control group.

Table 2 shows that t-calculated value for the post-test achievement score is 7.98. This value is greater than the table value of 1.96. The hypothesis that there is no significant difference between the mean achievement scores of the students who practiced independently and those who practiced collaboratively is, therefore, rejected.

The result of the study as shown in Tables 1 and 2 reveals that there is a significant difference between the treatment rate of those who practiced expository writing collaboratively and those who did so individually. The t-calculated value is greater than the table t of 1.96. This finding supports the findings of Johnson and Johnson (1986) who reported that cooperative teams achieve at higher level of thought than those who work independently; and Gokhale (2005) who stated that collaborative learning promoted the development of critical thinking, clarification and evaluation of ideas. Similarly, the study corroborates the report of Beckman (1990), Chickering and Gamson (1991), Johnson, Johnson, Smith (1991), Goodsell, Maher, Tinto (1992) whose various studies agreed that regardless of the subject matter, students working collaboratively in small groups tend to learn more than those who studied under individualized condition. Finally, this study supports the findings of Blaye (1990) that children who worked as collaborative pairs on a task of planning and problem solving were twice as successful as children who had the same experience working alone. The respondents to this study had the same amount of experience, having been lectured for four weeks on the technique of expository writing. Collaborative practice made the difference in the achievement scores of the two groups. Expository writing requires critical thinking, clarification and evaluation of ideas. Collaborative work promotes the above attributes.

CONCLUSIONS

Since those who practiced writing collaboratively achieved better results than those who practiced independently

in the post-test in which all the participants wrote individually, it is logical to conclude that collaborative writing practice enhances better independent writing when learners are given similar writing tasks. This conclusion appears to affirm Vygotsky's theory of zone of proximal development (ZPD) which implies that a learner would use the techniques that he gained during collaborative interaction in solving a similar problem independently. Consequently, in all L₂ countries where the teaching of writing is dominated by explicit instruction followed by independent practice, learners should practice collaboratively to enhance their chances of better writing.

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